UMO 1531.1 Patent

# REMARKS

Support for amended claims 1, 8, 11, 12, 19, and 20 can be found in the specification on page 8, lines 17-25 which discuss membrane proteins. Support for new claim 21 can be found in the specification on page 11, lines 26-29 which discuss infection of the larvae by injection.

# CONCLUSION

In view of the foregoing, Applicants request the entry of the amendments prior to the initial examination.

### VERSION WITH MARKINGS SHOWING CHANGES MADE

# IN THE CLAIMS:

#### CLAIM 1:

- 1. (once amended) A method for producing a recombinant membrane protein in an insect larvae expression system, the method comprising:
- (a) infection of larvae with a vector that has a nucleic acid sequence that encodes a recombinant <u>membrane</u> fusion protein with an affinity tag wherein the recombinant <u>membrane</u> protein is expressed in the larvae; and
- (b) purification of the recombinant <u>membrane</u> protein from said larvae by affinity chromatography.

#### CLAIM 2: CANCELLED

### CLAIM 8:

8. (once amended) The method of claim 1 further comprising isolation of a protein fraction from the larvae wherein the fraction contains the recombinant <u>membrane</u> fusion protein with the affinity tag.

#### CLAIM 11:

11. (once amended) The method of claim 1 further comprising the removal of the affinity tag from the recombinant <u>membrane</u> fusion protein.

### CLAIM 12:

12. (once amended) The method of claim  $\underline{\mathbf{1}}$  wherein the recombinant membrane fusion protein is selected from the class of

proteins consisting of transport, channel forming, receptor, junctional, cytoskeletal, and other membrane associated proteins.

## CLAIM 19:

19. (once amended) The method of claim 1 wherein the recombinant <u>membrane</u> fusion protein has biological activity substantially the same as the native form of the protein.

# CLAIM 20:

20. (once amended) The method of claim 1 wherein the recombinant <u>membrane</u> fusion protein has substantially the same structure as the native form of the protein.

#### CLAIM 21: NEW

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If there are any additional charges in this matter, please charge Deposit Account No. 19-1345.

Respectfully submitted,

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